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	Application No.	Applicant(s)	
	09/447,378	NISHIKAWA ET AL	
Notice of Allowability	Examiner	Art Unit	
	Mike Qi	2871	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.			
1. This communication is responsive to <i>the response of Nov.23, 2004</i> .			
2. The allowed claim(s) is/are <u>1-5,10,11,15-17,19,20,24 and 39</u> .			
3. The drawings filed on are accepted by the Examiner.			
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority una)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have  2.  Certified copies of the priority documents have  3.  Copies of the certified copies of the priority documents have  International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>5.  A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ul>	been received.  been received in Application No cuments have been received in this r  of this communication to file a reply of this application.	national stage applicational stage application and stage applicati	quirements
<ul> <li>6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date 7/25/2002.</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>			
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. Notice of Informal Pa 6. Interview Summary ( Paper No./Mail Date 8), 7. Examiner's Amendm 8. Examiner's Stateme 9. Other	(PTO-413), e nent/Comment	·

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## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1-5,10-11,15-17,19-20,24 and 39 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:

The prior art of record neither discloses nor teaches a liquid crystal display device comprising various elements, more specifically, as the following:

light-shielding film is disposed to overlap with boundaries of the orientation direction of the liquid crystal formed by the orientation divider, and the light-shielding film overlapping the orientation divider along the extension direction of the orientation divider as shown in Fig.4 [claims 1,11,15 and 20];

the drain signal lines are disposed to overlap the orientation control window's extension region along the longitudinal direction of the extension region as shown in Fig.4 [claim 24];

a light-shielding film is disposed to overlap the orientation divider along the extension direction of the orientation divider as shown in Fig.4 [claim 39].

The closest references AAPA, US 6,097,466 (Koma) and US 6,157,428 disclose a structure of a liquid crystal using alignment control window to divide the orientation direction in a pixel electrode region so as to enlarge the viewing angle display, but the prior art of record do not disclose the arrangement for the alignment control window in which the drain signal lines functions as a light-shielding film is disposed to overlap the orientation divider along the extension direction of the orientation divider as shown in Fig.4 so as to increase the contrast ratio. The other reference such as US 6,456,352

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(Matsuyama et al) discloses that using control electrode as an orientation control electrode surrounds the periphery of the pixel electrode, but the structure is different from the orientation divider of this application. Most close references found have a common assignee or same inventor having different claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (571) 272-2299. The examiner can normally be reached on M-T 8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Qi January 25, 2005

> TARIFUR R. CHOWDHURY PRIMARY EXAMINER